

REMARKS***Claim Rejections – 35 U.S.C. §103***Introduction

The base reference used for rejection is pre-grant
5 publication US 2004/0254424 of Simkulet et al., published
December 16, 2004. The current application which is the subject
of this office action, US 10/597,539, was filed as
PCT/US05/03215 on February 3, 2005, which in turn claims benefit
of provisional application US 60/542,736 filed February 6, 2004.
10 Consequently, the base reference US 2004/0254424 is disqualified
as prior art, to the extent that any commensurate disclosures by
US 2004/0254424 on December 16, 2004 were previously made in
priority document US 60/542,736 on February 6, 2004.

As described in detail below, the subject matter of the
15 rejected claims was first disclosed in the priority application
US 60/542,736, and so the base reference US 2004/0254424 is
disqualified as prior art. Because all claims rejections of
record are made under 35 U.S.C. §103 and because US 2004/0254424
is used as the base reference for all of these rejections, all
20 rejections of record are overcome by the disqualification of US
2004/0254424 as prior art, and no claim amendments are required.

Because no claims are amended, any future office action
which may be issued by examiner will not be necessitated by
applicants' amendment. Therefore, any such future office

action, to the extent that it has a different basis than the current rejection, must be non-final.

Having overcome all rejections of record by the disqualification of US 2004/0254424 as prior art, and given the
5 breadth of prior art already on the record in this case including prior art uncovered in counterpart cases abroad, it is applicant's view that all claims are novel and non-obvious in relation to all qualified prior art of record, and so should be allowed at this time.

10 Below, we examine in further detail, how all of the independent claims in the present application are fully disclosed by priority application US 60/542,736, thereby disqualifying US 2004/0254424 as prior art.

15 Disqualification of US 2004/0254424

Independent apparatus claim 1, which is mirrored by independent method claim 22, specifies: "An apparatus integrating forward and panoramic fields, comprising: a primary reflector, comprising a convex surface in relation to the
20 forward field, reflective on at least part of said convex surface; a secondary reflector, forward of said primary reflector relative to said forward field, reflective on at least part a surface thereof facing rearward toward said primary reflector, comprising a substantially flat geometry facing

rearward toward said primary reflector; a primary reflector hole in said primary reflector, substantially centered about an optical axis of said apparatus; and a secondary reflector hole in said secondary reflector, substantially centered about said optical axis, said secondary reflector hole comprising a diameter smaller than a diameter of said primary reflector hole." Independent method claim 22 contains similar recitations.

Independent apparatus claim 43, which is mirrored by independent method claim 44, specifies: "An apparatus integrating forward and panoramic fields, comprising: a primary reflector, comprising a convex surface in relation to the forward field, reflective on at least part of said convex surface; a secondary reflector, forward of said primary reflector relative to said forward field, reflective on at least part a surface thereof facing rearward toward said primary reflector, comprising a substantially flat geometry facing rearward toward said primary reflector; a primary reflector hole in said primary reflector, substantially centered about an optical axis of said apparatus; and said secondary reflector comprising a diameter smaller than a diameter of said primary reflector."

All of the foregoing claim elements are clearly disclosed in priority application US 60/542,736. For example:

Page 4, last paragraph states:

5 “. . . The omnidirectional optical system **100** is
comprised of a primary reflector **102**, a secondary
reflector **104**, a forward imaging lens group **106**, a
focusing lens group **108**, an image plane **110**, and an
optical axis **112**.”

Page 5, first full paragraph states:

10 “In the preferred embodiment, the primary
reflector **102** has a spherical geometry, with a hole
through the central apex centered on the optical axis
112.”

Page 5 second paragraph states:

15 “In the preferred embodiment, the secondary
reflector **104** has a flat or planar geometry with a
hole centered on the optical axis **112**. The secondary
reflector **104** is placed in front of the primary
reflector **102** with respect to the image plane **110** and
is centered along the optical axis **112**.”

Page 6 first full paragraph states:

20 “The forward imaging lens group **106** is designed
to collect the forward field of view **318** and transfer
it through the focusing lens group **108** to the image
plane **110**. The forward imaging lens group **106** defines
the forward field of view **318** boundaries. . . . The

forward imaging lens group **106** is placed directly
behind the secondary reflector **104** with respect to the
image plane **110** and it is centered on the optical axis
112."

5 These features are all described with reference to Figures
1 through 6 of priority application 60/542,736, which map very
tightly to Figure 1 through 6 of the subject application
10/597,539, and which predate the cited base reference US
2004/0254424.

10 As regards independent claims 1 and 22, these figures 1
through 6 of priority application 60/542,736 clearly illustrate
that the primary reflector comprises "a convex surface in
relation to the forward field, reflective on at least part of
said convex surface," that the secondary reflector is "forward
15 of said primary reflector relative to said forward field,
reflective on at least part a surface thereof facing rearward
toward said primary reflector, comprising a substantially flat
geometry facing rearward toward said primary reflector," that
the primary reflector hole is "substantially centered about an
20 optical axis of said apparatus," that the secondary reflector
hole is "substantially centered about said optical axis," and
finally, the "secondary reflector hole comprising a diameter
smaller than a diameter of said primary reflector hole." Base
reference US 2004/0254424 - which was published after the filing

of priority application 60/542,736 - is thereby disqualified in relation to independent claims 1 and 22, and the 35 U.S.C. §103 rejection of these claims is thereby overcome. Because of this, the rejections of any claims dependent upon claims 1 and 22 is also overcome.

Similarly, Figures 1 through 6 of priority application 60/542,736 also clearly illustrate that the primary reflector comprises "a convex surface in relation to the forward field, reflective on at least part of said convex surface," that the secondary reflector is "forward of said primary reflector relative to said forward field, reflective on at least part a surface thereof facing rearward toward said primary reflector, comprising a substantially flat geometry facing rearward toward said primary reflector," that there is "a primary reflector hole in said primary reflector, substantially centered about an optical axis of said apparatus," and finally, "said secondary reflector comprising a diameter smaller than a diameter of said primary reflector." As such, all elements of independent claims 43 and 44 were disclosed in priority document 60/542,736, before the publication of base reference US 2004/0254424. Base reference US 2004/0254424 is thereby disqualified in relation to independent claims 43 and 44, and the 35 U.S.C. §103 rejection of these claims is thereby overcome.

Allowable Subject Matter

Applicants appreciate the indication of allowable subject matter, and look forward to allowance of the remaining claims in light of the disqualification of base reference US 2004/0254424 as prior art.

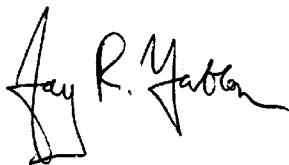
Conclusion

With all rejections of record having been overcome, applicants look forward to receiving a notice of allowance in the near future.

As noted earlier, if this reply does not result in allowance of all claims, applicants' counsel hereby respectfully requests a telephone interview with examiner Timothy J. Thompson, following receipt of this reply, and prior to issuance of any further office action.

Finally, as also noted earlier, because no claims are amended, any future office action which may be issued by examiner will not be necessitated by applicants' amendment. Therefore, any such future office action must be non-final.

Respectfully submitted,

A handwritten signature in black ink, reading "Jay R. Yablon". The signature is fluid and cursive, with the first name "Jay" and last name "Yablon" clearly legible, and "R." as a middle initial.

Jay R. Yablon, Registration # 30604
910 Northumberland Drive
Schenectady, New York 12309-2814
Telephone / Fax: (518)377-6737
email: jyablon@nycap.rr.com